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09/920,232	07/31/2001	Alex Xueyuan Huang	3399P046	5302

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BLAKELY SOKOLOFF TAYLOR & ZAFMAN/PDC
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025

EXAMINER	
FLEURANTIN, JEAN B	
ART UNIT	**PAPER NUMBER**
2172	6

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/920,232	HUANG ET AL.	
	Examiner	Art Unit	
	Jean B Fleurantin	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This is in response to the application file on July 31, 2001, in which claims 1-39 are presented for examination.

2. Declarations filed on September 08, 2001 and January 18, 2002 (Paper Numbers 2 and 3) have been entered, and the miscellaneous letter filed on June 03, 2002 (Paper No. 5) has been entered.

Drawings

3. The drawings filed on January 18, 2002 are objected by the Draftsperson under 37 CRF 1.84 or 1.152 as indicated in the "Notice of Draftsperson's Patent Drawing Review," PTO-948.

Claim Objections

4. Claim 21 is objected to because of the following informalities:

On line 1, the Examiner suggests to insert "of" after method. Appropriate correction is required, for grammatical purposes.

Specification

5. The application is objected to because of alterations which have not been initialed and/or dated as is required by 37 CFR 1.52(c). A properly executed oath or declaration which complies with 37 CFR 1.67(a) and identifies the application by application number and filing date is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1- 39 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,295,541 issued to Bodnar et al. ("hereinafter Bodnar").

As per claim 1, Bodnar discloses, "a method of synchronizing states of data between a plurality of devices over an unreliable communication channel" (see col. 10, lines 57-60), the method comprising:

"retrieving data from the devices" as a mechanism for retrieving a record from a client, (see col. 42, lines 2-3);

"updating centrally stored data, based on the data retrieved from the devices, so as to automatically recover from a prior synchronization failure, if any" as the synchronizer is capable of automatically synchronizing data among an arbitrary number of accessible datasets in a single synchronization session following user selection of datasets, (see col. 10, lines 57-60); and

"updating the data states on the devices based on the updated centrally stored data" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client has not seen before, and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47), "including

communicating with at least one of the devices over the unreliable communication channel" as includes various conflict or duplicate resolution strategies that handle the increased complexities of allowing synchronization for an arbitrary number of datasets and including in the synchronization even data from datasets that are not available, (see col. 4, lines 29-33).

As per claim 2, Bodnar discloses, "wherein the unreliable communication channel comprises a wireless network", (see col. 4, lines 29-33).

As per claim 3, Bodnar discloses, "wherein the wireless network is a wireless telecommunications network", (see col. 4, lines 14-25).

As per claim 4, Bodnar discloses, "said updating centrally stored data comprises: determining actual states of the data on the devices" as a means of synchronizing each of the more than two designated datasets includes a record that corresponds to and is in a synchronized state with, (see col. 4 lines 60-65);and

"updating centrally stored data indicating actions to be performed on the devices and states of the data on the devices" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47).

As per claim 5, Bodnar discloses, "wherein said updating the data states on the devices comprises updating the data states on the devices based on the data indicating actions to be performed on the devices and data indicating the actual states of the data on the devices", (see col. 4, lines 60-65), and column 5, lines 1-7.

As per claim 6, Bodnar discloses, "wherein said updating centrally stored data comprises: updating a truth database representing a true state of the data" (see col. 25, lines 12-15); and

"updating an action database indicating actions to be performed on the devices during a next update" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47), and column 43, lines 12-27.

As per claim 7, Bodnar discloses, "wherein said updating centrally stored data further comprises: creating an effective action database which accounts for any of the devices which were offline during a previous synchronization" as the synchronizer initializes a counter variable that will count the number of records that have been added to the client prior to the current synchronization, (see col. 43, lines 39-42); and

"saving the truth database and the effective action database in an atomic transaction", (see col. 40, lines 30-42);

"wherein said updating the data on the devices comprises using the effective action database to update data on the devices", (see col. 39, lines 30-33), and column 5, lines 1-17.

As per claim 8, Bodnar discloses, "a method of synchronizing states of data between a plurality of devices" (see col. 10, lines 57-60), the method comprising:

"retrieving data from the devices" as a mechanism for retrieving a record from a client, (see col. 42, lines 2-3);

"automatically recovering from a prior synchronization failure, if any, by updating centrally stored data" as the synchronizer is capable of automatically synchronizing data among an arbitrary number of accessible datasets in a single synchronization session following user selection of datasets, (see col. 10, lines 57-60); and

"updating the data states on the devices" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client has not seen before, and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47), "including communicating with at least one of the devices over a wireless network" as includes various conflict or duplicate resolution strategies that handle the increased complexities of allowing synchronization for an arbitrary number of datasets and including in the synchronization even data from datasets that are not available, (see col. 4, lines 29-33).

As per claim 9, Bodnar discloses, "wherein the wireless network is a wireless telecommunications network", (see col. 4, lines 14-25).

As per claim 10, in addition to claim 1, Bodnar discloses, "determining actual states of the data on the devices" as a means of synchronizing each of the more than two designated

datasets includes a record that corresponds to and is in a synchronized state with, (see col. 4 lines 60-65); and

"maintaining centrally stored data indicating actions to be performed on the devices and states of the data on the devices" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client has not seen before, and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47).

As per claim 11, Bodnar discloses, "wherein said updating the data states on the devices comprises updating the data states on the devices based on the centrally stored data" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47).

As per claim 12, in addition to claim 1, Bodnar discloses, "updating a truth database representing a true state of the data" (see col. 14, lines 41-42); and

"updating an action database indicating actions to be performed on the devices during a next update" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47), and column 43, lines 12-27.

As per claim 13, in addition to claim 1, Bodnar further discloses, "creating an effective action database which accounts for any of the devices which were offline during a previous synchronization" as the synchronizer initializes a counter variable that will count the number of records that have been added to the client prior to the current synchronization, (see col. 43, lines 39-42), and column 10, lines 57-60;

"saving the truth database and the effective action database in an atomic transaction", (see col. 40, lines 30-42);

"wherein said updating the data on the devices comprises using the effective action database to update data on the devices", (see col. 39, lines 30-33), and column 5, lines 1-17.

As per claim 14, Bodnar discloses, "a method of performing synchronization process to synchronize states data between a plurality of devices" (see col. 10, lines 57-60), the method comprising:

"retrieving data from the devices" as a mechanism for retrieving a record from a client, (see col. 42, lines 2-3);

"maintaining data indicating actions to be performed on the devices and data indicating the actual states of the data on the devices", (see col. 4, lines 60-65), and column 25, lines 12-18;

"using a recovery algorithm to determine actual states of the data on the devices" (see col. 4, lines 51-53);

"updating the data indicating actions to be performed on the devices and the data indicating the actual states of the data on the devices, based on the results of the algorithm" as the synchronizer is capable of automatically synchronizing data among an arbitrary number of

accessible datasets in a single synchronization session following user selection of datasets, (see col. 10, lines 57-60); and

"updating the data states on the devices" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client has not seen before, and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47), "including communicating with at least one of the devices over a wireless network" as includes various conflict or duplicate resolution strategies that handle the increased complexities of allowing synchronization for an arbitrary number of datasets and including in the synchronization even data from datasets that are not available, (see col. 4, lines 29-33).

As per claim 15, Bodnar discloses, "wherein said updating the data states on the devices comprises updating the data states on the devices based on the data indicating actions to be performed on the devices and data indicating the actual states of the data on the devices", (see col. 4, lines 60-65), and column 5, lines 1-7.

As per claim 16, Bodnar discloses, "wherein the wireless network is a wireless telecommunications network", (see col. 4, lines 14-25).

As per claim 17, Bodnar discloses, "a method of synchronizing states of data between a plurality of devices" (see col. 10, lines 57-60), the method comprising:

"maintaining a truth database representing a true state of the data" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization (see col. 25, lines 12-15);

"maintining an action database indicating actions to be performed on the devices during a next update" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization, and an original modification time to be used as the priority time that is compared during automatic conflict resolution, (see col. 25, lines 12- 18);

"retrieving the data from the devices, including communicating with at least one of the devices over the wireless network" as a mechanism for retrieving a record from a client, (see col. 42, lines 2-3);

"determining actual current states of individual elements of the data based on the action database" as a means of synchronizing each of the more than two designated datasets includes a record that corresponds to and is in a synchronized state with, (see col. 4 lines 60-65) and "the data retrieved from the devices", (see col. 42, lines 2-3);

"updating the truth database and the action database based on a result of said determining" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization, and an original modification time to be used as the priority time that is compared during automatic conflict resolution, (see col. 25, lines 12-17); and

"updating the data on the devices, including communicating with at least one of the devices over a wireless telecommunications network" as includes various conflict or duplicate resolution strategies that handle the increased complexities of allowing synchronization for an

arbitrary number of datasets and including in the synchronization even data from datasets that are not available, (see col. 4, lines 29-33).

As per claim 18, Bodnar discloses, "wherein said determining comprises determining actual current states of individual elements of the data so as to automatically recover from a synchronization failure" as the synchronizer is capable of automatically synchronizing data among an arbitrary number of accessible datasets in a single synchronization session following user selection of datasets, (see col. 10, lines 57-60).

As per claim 19, Bodnar discloses, "wherein the data comprises contact data representing a plurality of contacts", (see figure 2).

As per claim 20, in addition to claim 1, Bodnar further discloses, "creating an effective action database which accounts for any of the devices which were offline during a previous synchronization" as the synchronizer initializes a counter variable that will count the number of records that have been added to the client prior to the current synchronization, (see col. 43, lines 39-42); and

"saving the truth database and the effective action database in an atomic transaction", (see col. 40, lines 30-42);

"wherein said updating the data on the devices comprises using the effective action database to update data on the devices", (see col. 39, lines 30-33), and column 5, lines 1-17.

As per claim 21, Bodnar discloses, "a method synchronizing states of contact data between a plurality of devices" (see col. 10, lines 57-60), the method comprising:

"maintaining a truth database representing a true state of the contact data, the contact data representing a plurality of contacts" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization (see col. 25, lines 12-15);

"maintaining an action table for each of the devices, the action table indicating actions to be performed on the corresponding device during a next update" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization, and an original modification time to be used as the priority time that is compared during automatic conflict resolution, (see col. 25, lines 12- 18);

"retrieving contact data from the devices, including communicating with It least one of the devices over a wireless telecommunications network" as a mechanism for retrieving a record from a client, (see col. 42, lines 2-3);

"determining actual current states of the contacts on the devices based on the contact data retrieved from the devices and the action tables, so as to automatically recover from a synchronization failure, if any" as the synchronizer is capable of automatically synchronizing data among an arbitrary number of accessible datasets in a single synchronization session following user selection of datasets, (see col. 10, lines 57-60);

"updating the truth database and the action tables based on a result of said determining" as a means for storing two timestamps for each record a last modification time for determining

the changes since a prior synchronization, and an original modification time to be used as the priority time that is compared during automatic conflict resolution, (see col. 25, lines 12- 17);

"creating an effective action table based for at least one of the devices based on the updated action table for the device and a previous version of the action table for the device, to account for any of the devices which were offline during a most-recent synchronization" as the synchronizer determines all records in the client that have been updated or added to the client prior to the current synchronization, (see col. 42, lines 60-67), and column 43, lines 39-42;

"saving the truth database and the effective action database in an atomic transaction", (see col. 40, lines 30-42);

"using the effective action table to update the states of the contact data on the devices" (see col. 39, lines 30-33), and column 5, lines 1-17, "including communicating with at least one of the devices over the wireless telecommunications network" as includes various conflict or duplicate resolution strategies that handle the increased complexities of allowing synchronization for an arbitrary number of datasets and including in the synchronization even data from datasets that are not available, (see col. 4, lines 29-33).

As per claim 22, Bodnar discloses, "an apparatus for synchronizing states of data between a plurality of devices over an unreliable communication channel" (see col. 10, lines 57-60), the method comprising:

"means for retrieving data from the devices" as a mechanism for retrieving a record from a client, (see col. 42, lines 2-3);

"means for automatically recovering from a prior synchronization failure, if any" as the synchronizer is capable of automatically synchronizing data among an arbitrary number of accessible datasets in a single synchronization session following user selection of datasets, (see col. 10, lines 57-60); and

"means for updating the data states on the devices based on the updated centrally stored data" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client has not seen before, and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47), "including communicating with at least one of the devices over the unreliable communication channel" as includes various conflict or duplicate resolution strategies that handle the increased complexities of allowing synchronization for an arbitrary number of datasets and including in the synchronization even data from datasets that are not available, (see col. 4, lines 29-33).

As per claim 23, Bodnar discloses, "wherein the unreliable communication channel comprises a wireless network", (see col. 4, lines 29-33).

As per claim 24, Bodnar discloses, "wherein the wireless network is a wireless telecommunications network", (see col. 4, lines 14-25).

As per claim 25, Bodnar discloses, wherein said means for communicating with at least one of the devices over the relatively unreliable communication channel comprises means for

communicating with said at least one of the devices over a wireless communications network", (see col. 4, lines 60-65), and column 5, lines 1-7.

As per claim 26, in addition to claim 1, Bodnar discloses, "means for determining actual states of the data on the devices" as a means of synchronizing each of the more than two designated datasets includes a record that corresponds to and is in a synchronized state with, (see col. 4 lines 60-65); and

"means for updating centrally stored data indicating actions to be performed on the devices and states of the data on the devices" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client has not seen before, and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47).

As per claim 27, in addition to claim 1, Bodnar discloses, "means for updating the dates states on the devices based on the data indicating actions to be performed on the devices and data indicating the actual states of the data on the devices" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47).

As per claim 28, in addition to claim 22, Bodnar discloses, "means for updating a truth database representing a true state of the data", (see col. 14, lines 41-42); and

"means for updating an action database indicating actions to be performed on the devices during a next update" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47), and column 43, lines 12-27.

As per claim 29, in addition to claim 22, Bodnar discloses, "means for creating an effective action database which accounts for any of the devices which were offline during a previous synchronization" as the synchronizer initializes a counter variable that will count the number of records that have been added to the client prior to the current synchronization, (see col. 43, lines 39-42); and

"means for saving the truth database and the effective action database in an atomic transaction", (see col. 40, lines 30-42);

"wherein said means for updating the data on the devices comprises using the effective action database to update data on the devices", (see col. 39, lines 30-33), and column 5, lines 1-17.

As per claim 30, Bodnar discloses, "an apparatus to synchronize data states a plurality of devices" (see col. 10, lines 57-60), the method comprising:

"a database system to store" (see figure 2, element 267)

"a database system to store a truth database representing a true state of the data" as a means for storing two timestamps for each record a last modification time for determining the

changes since a prior synchronization, and an original modification time to be used as the priority time that is compared during automatic conflict resolution, (see col. 25, lines 12- 18);

"maintaining a truth database representing a true state of the data" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization (see col. 25, lines 12-15), and

"an action database indicating actions to be performed on the devices during a next update" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization, and an original modification time to be used as the priority time that is compared during automatic conflict resolution, (see col. 25, lines 12- 18);

"a recovery unit to determine actual current states of the data based on the action database and data retrieved from the devices" as the synchronizer is capable of automatically synchronizing data among an arbitrary number of accessible datasets in a single synchronization session following user selection of datasets, (see col. 10, lines 57-60),

"a synchronization engine to update the truth database and the action database, based on output of the recovery module" as the synchronizer is capable of automatically synchronizing data among an arbitrary number of accessible datasets in a single synchronization session following user selection of datasets, (see col. 10, lines 57-60), and "to update data states on the devices based on the action database, by communicating with at least one of the devices over the wireless network" as includes various conflict or duplicate resolution strategies that handle the increased complexities of allowing synchronization for an arbitrary number of datasets and

including in the synchronization even data from datasets that are not available, (see col. 4, lines 29-33).

As per claim 31, Bodnar discloses, "wherein the wireless network is a wireless telecommunications network", (see col. 4, lines 14-25).

As per claim 32, Bodnar discloses, "wherein the synchronization engine further is to update the truth database and the action database, based on output of the recovery module, so as to automatically recover from a failure of a prior synchronization" as the synchronizer is capable of automatically synchronizing data among an arbitrary number of accessible datasets in a single synchronization session following user selection of datasets, (see col. 10, lines 57-60).

As per claim 33, Bodnar discloses, "a machine-readable program storage medium storing instructions which, when executed in a processing system, cause the processing system to perform a method of synchronizing states of data between a plurality of devices, at least one of which is a mobile device operating on a wireless telecommunications network, the method comprising" (see col. 10, lines 57-60), the method comprising:

"maintaining a truth database representing a true state of the data" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization (see col. 25, lines 12-15);

"maintining an action database indicating actions to be performed on the devices during a next update" as a means for storing two timestamps for each record a last modification time for

determining the changes since a prior synchronization, and an original modification time to be used as the priority time that is compared during automatic conflict resolution, (see col. 25, lines 12- 18);

"retrieving the data from the devices, including communicating with at least one of the devices over the wireless telecommunications network" as a mechanism for retrieving a record from a client, (see col. 42, lines 2-3);

"determining actual current states of individual elements of the data based on the action database" as a means of synchronizing each of the more than two designated datasets includes a record that corresponds to and is in a synchronized state with, (see col. 4 lines 60-65) and "the data retrieved from the devices", (see col. 42, lines 2-3);

"updating the truth database and the action database based on a result of said determining" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization, and an original modification time to be used as the priority time that is compared during automatic conflict resolution, (see col. 25, lines 12- 17); and

"updating the data on the devices, including communicating with at least one of the devices over a wireless telecommunications network" as includes various conflict or duplicate resolution strategies that handle the increased complexities of allowing synchronization for an arbitrary number of datasets and including in the synchronization even data from datasets that are not available, (see col. 4, lines 29-33).

As per claim 34, Bodnar discloses, "wherein said determining comprises determining actual current states of individual elements of the data so as to automatically recover from a synchronization failure" as the synchronizer is capable of automatically synchronizing data among an arbitrary number of accessible datasets in a single synchronization session following user selection of datasets, (see col. 10, lines 57-60).

As per claim 35, Bodnar discloses, "wherein the data comprises contact data representing a plurality of contacts", (see figure 2).

As per claim 36, Bodnar further discloses, "creating an effective action database which accounts for any of the devices which were offline during a previous synchronization" as the synchronizer initializes a counter variable that will count the number of records that have been added to the client prior to the current synchronization, (see col. 43, lines 39-42); and

"saving the truth database and the effective action database in an atomic transaction", (see col. 40, lines 30-42);

"wherein said updating the data on the devices comprises using the effective action database to update data on the devices", (see col. 39, lines 30-33), and column 5, lines 1-17.

As per claim 37, Bodnar discloses, "a processing system" (see figure 3A), comprising:

"a processor", (see figure 3A, element 301);

"a data communication device coupled to the processor to communicate data with a plurality of remote devices, at least one of which operates on a wireless telecommunications network", (see col. 4, lines 11-25), and column 5, lines 10-22; and

"a storage facility coupled to the processor and storing instructions for execution by the processor to cause the processing system to perform a method" as the synchronizer examines each client to identify any changes in the client that the synchronizer has not seen before, and any changes in the GUD that the client has not seen before, and based on those fresh changes, determines actions to be performed (see col. 42, lines 42-47), comprising:

"maintaining a truth database representing a true state of data maintained by the devices" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization (see col. 25, lines 12-15);

"maintaining an action database indicating actions to be performed on the devices during a next update" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization, and an original modification time to be used as the priority time that is compared during automatic conflict resolution, (see col. 25, lines 12- 18);

"retrieving the data from the devices, including communicating with at least one of the devices over the wireless telecommunications network" as a mechanism for retrieving a record from a client, (see col. 42, lines 2-3);

"determining actual current states of individual elements of the data based on the action database" as a means of synchronizing each of the more than two designated datasets includes a

record that corresponds to and is in a synchronized state with, (see col. 4 lines 60-65) and "the data retrieved from the devices", (see col. 42, lines 2-3);

"updating the truth database and the action database based on a result of determining the actual current states of individual elements of the data" as a means for storing two timestamps for each record a last modification time for determining the changes since a prior synchronization, and an original modification time to be used as the priority time that is compared during automatic conflict resolution, (see col. 25, lines 12- 17);

"creating an effective action database which accounts for any of the devices which were offline during, a previous synchronization" as the synchronizer initializes a counter variable that will count the number of records that have been added to the client prior to the current synchronization, (see col. 43, lines 39-42), and column 10, lines 57-60;

"saving the truth database and the effective action database in an atomic transaction", (see col. 40, lines 30-42); and

"using the effective action database to update the data on the devices" (see col. 39, lines 30-33), and column 5, lines 1-17, "including communicating with at least one of the devices over the wireless telecommunications network" as includes various conflict or duplicate resolution strategies that handle the increased complexities of allowing synchronization for an arbitrary number of datasets and including in the synchronization even data from datasets that are not available, (see col. 4, lines 29-33).

As per claim 38, Bodnar discloses, "wherein the data comprises contact data representing a plurality of contacts", (see Bodnar's figure 2).

As per claim 39, in addition to claim 37, Bodnar further discloses, "creating an effective action database based on the updated action table and previous version of the action database to account for any of the devices which were offline during a most-recent synchronization" as the synchronizer determines all records in the client that have been updated or added to the client prior to the current synchronization, (see col. 42, lines 60-67), and column 43, lines 39-42.

Prior Art

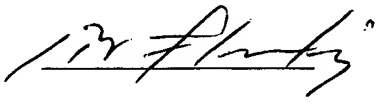
7. The prior art of record and not relied on upon is considered pertinent to applicant's disclosure. Bauer et al. U.S. Patent Numbers 5,870,765; 5,884,325 and 5,926,816 relate to database synchronizer. LaRue et al. U.S. Patent Number 6,487,560 relates generally to synchronization.

Contact Information

8. Any inquiry concerning this communication from examiner should be directed to Jean Bolte Fleurantin at (703) 308-6718. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 6:00 P.M.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Mr. REENE JOHN E can be reached at **(703) 305-9790.** The FAX phone numbers for the Group 2100 Customer Service Center are: ***After Final* (703) 746-7238, *Official* (703) 746-7239**, and ***Non-Official (703) 746-7240***. NOTE: Documents transmitted by facsimile will be entered as official documents on the file wrapper unless clearly marked "***DRAFT***".

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2100 Customer Service Center receptionist whose telephone numbers are **(703) 306-5631, (703) 306-5632, (703) 306-5633**.



Jean Bolte Fleurantin

2004-02-6